

line 12, after "surface", insert -or first portion-,
page 17, line 5, delete "showing"; insert -shown-,
delete "or"; insert -S0-,
line 6, delete "by"; insert -to-.
line 13 after "52,000W", insert -(or, in other words, over 200 KW/m²)-,
page 19, line 17, after "soften", insert -a first portion of-,
line 17, after "depth" and before the ".", insert -relative to a second portion-.

IN THE CLAIMS:

Please cancel without prejudice claims 1-17 and insert in lieu thereof the following claims:

~~33.~~¹¹⁸ In a method of softening a portion only of an object which is responsive to heat treatment, the steps of
providing an object having a working portion and a mounting portion,
the mounting portion having a depth sufficient to subsequently form mechanical connecting means therein so as to enable said object to be mounted for work operation, and
treating said mounting portion by subjecting it to an electric source of heat until a predetermined temperature therein is obtained, and
cooling said mounting portion,
said temperature being a temperature at which the hardness, in the final object, of the mounting portion will be less than the hardness of the working portion.

19 34. The method of claim ¹⁸~~33~~ further characterized in that the object is composed of steel.

20 35. The method of claim ¹⁹~~34~~ further characterized in that the depth of the mounting portion is about two inches.

21 36. The method of claim ¹⁸~~33~~ further characterized in that the electric source of heat is infrared radiation.

22 37. The method of claim ²¹~~36~~ further characterized in that the object is composed of steel.

23 38. The method of claim ²²~~37~~ further characterized in that the depth of the mounting portion is about two inches.

24 39. The method of claim ²³~~38~~ further characterized in that the intensity of the infrared radiation reaches at least about 200 kW/m².

25 40. In a method of softening a portion only of a steel workpiece which is responsive to heat treatment, the steps of

providing a steel workpiece having a first portion and a second portion,

treating said first portion by subjecting it to an electric source of heat until a predetermined temperature capable of softening said first portion is reached,

cooling said first portion following heating to complete tempering said first portion

whereby the hardness in the first portion, following heating and cooling thereof, will be softer than the hardness in the second portion thereof.

26 41. The method of claim ²⁵~~40~~ further characterized in that